

# Marine Magnetic Survey System



**SeaSPY's** accuracy is 0.1nT-the highest absolute accuracy of any magnetometer on the market. The world authority belonging to INTERMAGNET has independently tested and confirmed our specifications: 0.01 nT/Hz; counter sensitivity is 0.001 nT.

**SeaSPY** will collect accurate data in any surveying direction. This is not the case with optically pumped magnetometers which have dead zones and must be oriented at a specific angle relative to the earth's magnetic field. This issue can be particularly problematic in equatorial regions where you cannot collect data in every direction..

**Specification** :Operating Zones NO RESTRICTIONS  
SeaSPY will perform exactly according to spec throughout the entire range.

- Absolute Accuracy: 0.1nT
- Sensor Sensitivity: 0.01nT
- Counter Sensitivity: 0.001nT
- Resolution: 0.001nT
- Dead Zone: NONE
- Heading Error: NONE
- Temperature Drift: NONE
- Power Consumption: 1W standby, 3W maximum
- Timebase stability: 1ppm, -45°C to +60°C
- Range: 18,000nT to 120,000nT
- Gradient Tolerance: Over 10,000nT/m
- Sampling Range: 4Hz — 0.1Hz
- External Trigger: By RS-232
- Communications: RS-232, 9600bps
- Power Supply: 15VDC-35VDC or 100-240VAC
- Operating Temperature: -45°C to +60°C
- Temperature Sensor: -45°C to +60°C, 0.1 step

## Applications:

- Geo-hazard surveys
- Geological/geophysical surveys
- Route surveys
- Archeological surveys
- Search and recovery

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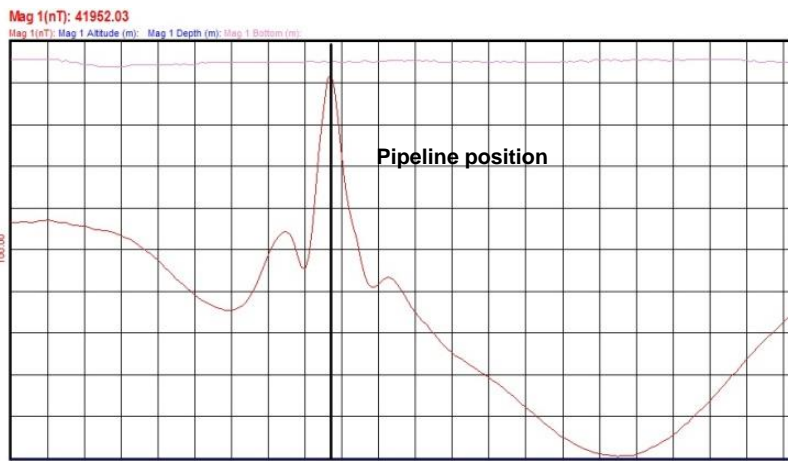
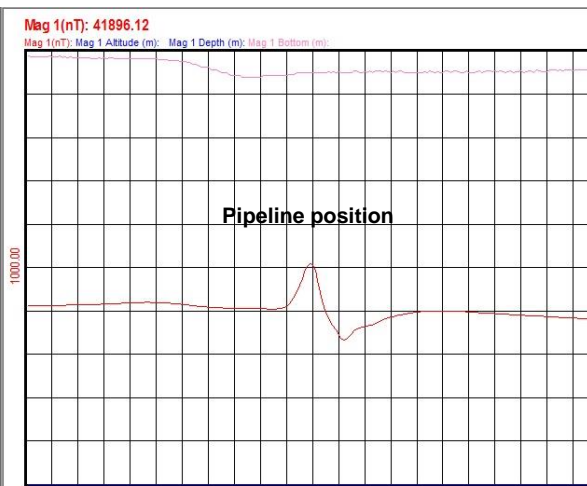
**Cable and Pipeline Survey**-A horizontal transverse gradiometer can be used to track cables, or pipelines in real time from relatively high towing altitudes.

**Detection of Small Ferrous Targets**-Short baseline gradient measurement in any direction (longitudinal, horizontal, or vertical) is useful for eliminating geological interference and diurnal variation.

**Shipwreck, Search and Salvage** - Medium baseline longitudinal gradient measurement can eliminate interference by geological bodies, while highlighting massive magnetic sources like steel hulls, boilers or engines. Smaller sources such as anchors or cannons will require a shorter baseline, and lower towing altitude.

**Environmental Survey**-Medium baseline measurement with a longitudinal gradiometer can highlight shallow magnetic sediments, while eliminating deeper geological influences. The baseline should be on the order of magnitude of the expected towing altitude.

**Exploration Geophysics**-Long baseline measurement with a longitudinal gradiometer is ideal since the bodies of interest are often far from the sensor, and produce very small gradients. The baseline should be on the order of magnitude of expected depth-to-source.



Example of magnetic survey result